Converting IP Address

The idea behind the lab is to get you comfortable with IP addresses and converting between Binary and decimal. Complete the following questions for the given IP addresses.

Submit your lab via the Assignment Tab found at Canvas.weber.edu. Save the file with your name and Lab 1 in the title as an RTF file type. Example JohnDoeLab1.rtf

Remember: 2¹²⁸ 2⁶⁴ 2³² 2¹⁶ 2⁸ 2⁴ 2² 2¹

Example: IP Address is 154.31.16.13 convert to Binary

| | | | | | | | | 100 - 16 - 0 - 0 - 154 |
|-----|----|----|----|---|---|---|---|-------------------------|
| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | 128 + 16 + 8 + 2 = 154 |
| 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | |
| | | | | | | | | • |
| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | 16 + 8 + 4 + 2 + 1 = 31 |
| 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | |
| | | | | _ | | | | |
| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | 16 = 16 |
| 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | |
| | | | | | | | | |
| 128 | 64 | 32 | 16 | 8 | 4 | 2 | 1 | 8 + 4 + 1 = 13 |
| 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | |

Answer is: 10011010.000111111.00010000.00001101

1. IP Address is 192.168.16.13 convert to Binary.

11000000.10101000.00010000.00001101

2. IP Address is 164.10.241.2 convert to Binary.

10100100.00001010.111110001.00000010

3. IP Address is 10.244.116.15 convert to Binary.

00001010.111110100.011110100.00001111

4. IP Address is 15.255.200.153 convert to Binary.

00001111.111111111.11001000.10011001

5. IP Address is 172.99.62.9 convert to Binary.

10101100.01100011.001111110.00001001

- IP Address is 10110100.11101011.00001000.10010001 convert to Decimal.
 180. 235.8.145
- 7. IP Address is 10001100.11111111.11000000.00000001 convert to Decimal.

 140.255.192.1
- 8. IP Address is 00010001.11001100.00000001.00010010 convert to Decimal.

 17. 204.1.18
- IP Address is 11100111.00110011.101010.111111110 convert to Decimal.
 231.51.170. 254
- 10. IP Address is 00010111.11101110.01010101.10000000 convert to Decimal.23. 238. 85.128